WHAT IS CLAIMED IS:

1. A method for preventing or treating an autoimmune disease in a subject, the method comprising the step of administering to the subject a therapeutically effective amount of an Activity Dependent Neurotrophic Factor (ADNF) polypeptide, wherein the ADNF polypeptide is a member selected from the group consisting of:

(a) an ADNF I polypeptide comprising an active core site having the following amino acid sequence:

Ser-Ala-Leu-Leu-Arg-Ser-Ile-Pro-Ala (SEQ ID NO:1);

(b) an ADNF III polypeptide comprising an active core site having the following amino acid sequence:

Asn-Ala-Pro-Val-Ser-Ile-Pro-Gln (SEQ ID NO:2); and

(c) a mixture *of* the ADNF I polypeptide of part (a) and the ADNF III polypeptide of part (b).

2. The method of claim 1, wherein the ADNF polypeptide is a member selected from the group consisting of a full length ADNF I polypeptide, a full length ADNF III polypeptide, and a mixture of a full length ADNF I polypeptide and a full length ADNF III polypeptide.

3. The method of claim 1, wherein the ADNF polypeptide is an ADNF I polypeptide.

4. The method of claim 3, wherein the active core site of the ADNF I polypeptide comprises at least one D-amino acid.

5. The method of claim 3, wherein the active core site of the ADNF I polypeptide comprises all D-amino acids.

6. The method of claim 3, wherein the ADNF I polypeptide is Ser-Ala-Leu-Leu-Arg-Ser-Ile-Pro-Ala (SEQ ID NO:1).

7. The method of claim 3, wherein the ADNF I polypeptide is selected from the group consisting of:

Val-Leu-Gly-Gly-Gly- Ser-Ala-Leu-Leu-Arg-Ser-Ile-Pro-Ala (SEQ ID NO:14);

Val-Glu-Glu-Gly-Ile-Val-Leu-Gly-Gly-Gly-Ser-Ala-Leu-Leu-Arg-Ser-Ile-Pro-Ala (SEQ ID NO:15);
Leu-Gly-Gly-Gly- Ser-Ala-Leu-Leu-Arg-Ser-Ile-Pro-Ala (SEQ ID NO:16);
Gly-Gly-Gly-Ser-Ala-Leu-Leu-Arg-Ser-Ile-Pro-Ala (SEQ ID NO:17);
Gly-Gly-Ser-Ala-Leu-Leu-Arg-Ser-Ile-Pro-Ala (SEQ ID NO:18);
Gly- Ser-Ala-Leu-Leu-Arg-Ser-Ile-Pro-Ala (SEQ ID NO:19); and
Ser-Ala-Leu-Leu-Arg-Ser-Ile-Pro-Ala (SEQ ID NO:1).

8. The method of claim 3, wherein the ADNF I polypeptide comprises up to about 20 amino acids at at least one of the N-terminus and the C-terminus of the active core site.

9. The method of claim 1, wherein the ADNF polypeptide is an ADNF III polypeptide.

10. The method of claim 9, wherein the ADNF polypeptide is a full length ADNF III polypeptide.

11. The method of claim 9, wherein the ADNF III polypeptide is Asn-Ala-Pro-Val-Ser-Ile-Pro-Gln (SEQ ID NO:1).

12. The method of claim 9, wherein the active core site of the ADNF III polypeptide comprises at least one D-amino acid.

13. The method of claim 9, wherein the active core site of the ADNF III polypeptide comprises all D-amino acids.

14. The method of claim 9, wherein the ADNF III polypeptide is a member selected from the group consisting of:
Gly-Gly-Asn-Ala-Pro-Val-Ser-Ile-Pro-Gln (SEQ ID NO:2);
Leu-Gly-Gly-Asn-Ala-Pro-Val-Ser-Ile-Pro-Gln-Gln-Ser (SEQ ID NO:3);
Leu-Gly-Leu-Gly-Gly-Asn-Ala-Pro-Val-Ser-Ile-Pro-Gln-Gln-Ser (SEQ ID NO:4);
Ser-Val-Arg-Leu-Gly-Leu-Gly-Gly-Asn-Ala-Pro-Val-Ser-Ile-Pro-Gln-Gln-Ser (SEQ ID NO:5); and
Asn-Ala-Pro-Val-Ser-Ile-Pro-Gln (SEQ ID NO:1).

15. The method of claim 9, wherein the ADNF III polypeptide comprises up to about 20 amino acids at at least one of the N-terminus and the C-terminus of the active core site.

16. The method of claim 1, wherein at least one of the ADNF polypeptides is encoded by a nucleic acid that is administered to the subject.

17. The method of claim 1, wherein an ADNF I polypeptide of part (a) and an ADNF III polypeptide of part (b) are administered to the subject.

18. The method of claim 17, wherein either or both active core sites of the ADNF I polypeptide and the ADNF III polypeptide comprise at least one D-amino acid.

19. The method of claim 17, wherein either or both active core sites of the ADNF I polypeptide and the ADNF III polypeptide comprise all D-amino acids.

20. The method of claim 17, wherein the ADNF I polypeptide is Ser-Ala-Leu-Leu-Arg-Ser-Ile-Pro-Ala (SEQ ID NO:1), and wherein the ADNF III polypeptide is Asn-Ala-Pro-Val-Ser-Ile-Pro-Gln (SEQ ID NO:2).

21. The method of claim 17, wherein the ADNF I polypeptide is a member selected from the group consisting of:

Val-Leu-Gly-Gly-Gly- Ser-Ala-Leu-Leu-Arg-Ser-Ile-Pro-Ala (SEQ ID NO:14);

Val-Glu-Glu-Gly-Ile-Val-Leu-Gly-Gly-Gly-Ser-Ala-Leu-Leu-Arg-Ser-Ile-Pro-Ala (SEQ ID NO:15);

Leu-Gly-Gly-Gly- Ser-Ala-Leu-Leu-Arg-Ser-Ile-Pro-Ala (SEQ ID NO:16);

Gly-Gly-Gly-Ser-Ala-Leu-Leu-Arg-Ser-Ile-Pro-Ala (SEQ ID NO:17);

Gly-Gly-Ser-Ala-Leu-Leu-Arg-Ser-Ile-Pro-Ala (SEQ ID NO:18);

Gly- Ser-Ala-Leu-Leu-Arg-Ser-Ile-Pro-Ala (SEQ ID NO:19); and

Ser-Ala-Leu-Leu-Arg-Ser-Ile-Pro-Ala (SEQ ID NO:1); and

wherein the ADNF III polypeptide is selected from the group consisting of:

Gly-Gly-Asn-Ala-Pro-Val-Ser-Ile-Pro-Gln (SEQ ID NO:20);

Leu-Gly-Gly-Asn-Ala-Pro-Val-Ser-Ile-Pro-Gln-Gln-Ser (SEQ ID NO:21);

Leu-Gly-Leu-Gly-Gly-Asn-Ala-Pro-Val-Ser-Ile-Pro-Gln-Gln-Ser (SEQ ID NO:22);

Ser-Val-Arg-Leu-Gly-Leu-Gly-Gly-Asn-Ala-Pro-Val-Ser-Ile-Pro-Gln-Gln-Ser (SEQ ID NO:23); and

Asn-Ala-Pro-Val-Ser-Ile-Pro-Gln (SEQ ID NO:2).

22. The method of claim 17, wherein the ADNF I polypeptide comprises up to about 20 amino acids at at least one of the N-terminus and the C-terminus of the active core site of the ADNF I polypeptide, and wherein the ADNF III polypeptide comprises up to about 20 amino acids at at least one of the N-terminus and the C-terminus of the active core site of the ADNF III polypeptide.

23. The method of claim 1, wherein the subject has an autoimmune disease.

24. The method of claim 1, wherein the ADNF polypeptide is administered to prevent an autoimmune disease.

25. The method of claim 1, wherein the autoimmune disease is selected from the group consisting of multiple sclerosis, myasthenia gravis, Guillan-Barre syndrome (antiphospholipid syndrome), systemic lupus erytromatosis, Behcet's syndrome, Sjogrens syndrome, rheumatoid arthritis, Hashimoto's disease/hypothyroiditis, primary biliary cirrhosis, mixed connective tissue disease, chronic active hepatitis, Graves' disease/hyperthyroiditis, scleroderma, chronic idiopathic thrombocytopenic purpura, diabetic neuropathy and septic shock.

26. The method of claim 1, wherein the ADNF polypeptide is administered intranasally.

27. The method of claim 1, wherein the ADNF polypeptide is administered orally.

28. The method of claim 1, wherein the ADNF polypeptide is injected.